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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/766,193

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Kang Sco Seo

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EXAMINER

DEBELIE, MITIKU W

ART UNIT

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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/766,193	Applicant(s) SEO ET AL.	
	Examiner Mitiku Debelie	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/30/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The reference listed in the information disclosure statement filed on 01/29/2004 has been considered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1 – 36 are provisionally rejected on the ground obviousness-type double patenting as being unpatentable over claims 1 – 34 of copending Application NO. 10/766238. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions relate to managing reproduction of images and related data associated with the images with the related data being graphic

data and subtitle data. Both inventions also relate to multiplexing the images and the related associated data into transport stream and packetized elementary streams.

This is a provisional obvious-type double patenting rejection because the conflicting claims have not been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1 - 32** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1, 31 and 32 define a recording medium having a data structure for managing reproduction duration of still images. The claimed invention would have been statutory had it been worded to include computer program embedded in a computer readable medium. Computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationship between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (U.S. Patent number 6,122,436) and in view of Kanazawa et al. (U.S. Patent Number 6,580,870).

Regarding claim 1, Okada discloses a recording medium having a data structure for managing reproduction duration of still images, comprising: a data area (Fig. 8(b) Data area) storing presentation data, the presentation data being divided into a number of still picture units (Fig. 9(b) VOB 1), each still picture unit including at least one still picture and associated related data (Fig. 20(e), decoding start time DTS#1 associated with the still picture V1), the related data not including audio data; a navigation area storing at least one playlist (Fig. 9(a) PGC), the playlist including at least one playitem (Fig. 9(a)-Cell), the playitem indicating at least one of the still picture units to reproduce and providing duration information for display of the still picture in the still picture unit (Fig. 9(a) Cell_Start_Time and Cell_End_Time). Okada however does not teach multiplexing of the still images into transport streams. Kanazawa, from the same field of endeavor, teaches multiplexing of video and audio data into a transport stream (see col. 1, lines 26 - 35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate multiplexing the still images into transport streams as

taught by Kanazawa into the still image management of Okada in order to make the still images packaged for transporting over a communication medium.

Regarding claim 2, Kanazawa teaches a recording medium wherein the related data in at least one still picture unit includes graphics data (see col. 15, lines 11 – 17).

Regarding claim 3, Okada teaches a recording medium wherein the related data in at least one still picture unit includes subtitle data (see col. 24, lines 40 – 58).

Regarding claim 4, Kanazawa teaches a recording medium wherein the presentation data is multiplexed into the transport stream on a still picture unit by still picture unit basis ((see col. 1, lines 26 - 35).

Regarding claim 5, the proposed combination of Okada and Kanazawa teaches a recording medium wherein the navigation area further includes a clip information file (see Okada, Fig. 9(a) MANAGEMENT INFORMATION FILE), the clip information file including at least one entry point map (see Okada, Fig. 9(a) VOB TABLE), the entry point map including at least one entry point providing at least an address (see Okada, Fig. 9(a) VOB_Strat_Address) of a still picture in the still picture and audio data stream. The transport stream, taught by Kanazawa in claim 1 above, does not change the arrangement seen on Fig. 9(a), therefore it can be understood as being in the transport stream (see Okada, Figs. 9(a) and 10(a), col. 18, lines 51 – 58).

Regarding claim 6, Kanazawa teaches a recording medium wherein the entry point map includes an entry point associated with still picture. (The entry point discussed in relation to claim one above, VOB_Strat_Address, is associated with a particular VOB, VOB 1 in this case) (see Fig. 9(a))

Regarding claim 7, Okada teaches a recording medium wherein the duration information indicates whether to display the still picture for one of a finite and an infinite period of time (see Figs. 9(a) Cell_Start_Time); and

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point (see Fig 10(a), col. 18, lines 64 – 67).

Regarding claim 8, Okada teaches a recording medium wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit (see Fig. 4)

Regarding claim 9, Okada teaches a recording medium wherein each elementary stream is a packetized elementary stream (see Fig. 4)

Regarding claim 10, Okada teaches a recording medium wherein each still picture still picture unit (fig. 4, SECTOR) includes one packet (PAYLOAD) from each packetized elementary stream (see col. 7, lines 9 – 13).

Regarding claim 11, claim 11 recites, "The recording medium of claim 10 wherein, the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the duration information

indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.” This claim reads on claim 7 above.

Regarding claim 12, claim 11 recites, “The recording medium of claim 1 wherein, the duration information indicates whether to display the still picture for one of a finite and an infinite period of time.” This claim reads on claim 7 above.

Regarding claim 13, Okada teaches a recording medium wherein the data area stores the presentation data in a first clip file, and stores audio data in a second clip file (see Fig. 7, col. 1, lines 34 – 39).

Regarding claim 14, Okada teaches a recording medium wherein the playlist (Fig. 9(a) PGC) further includes at least one sub-playitem, the sub-playitem (Fig. 9(a) Cell) providing navigation information for reproducing the audio data from the second clip file (see Fig. 9(a))

Regarding claim 15, Okada teaches a recording medium wherein the still picture unit includes only one picture (see Fig. 7(b) Still picture #1).

Regarding claim 16, claim 16 recites, “A recording medium having a data structure for managing reproduction duration of still images, comprising:
a data area storing presentation data multiplexed into a transport stream in a first file and storing audio data in a second file, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data; a navigation area storing at least one playlist, the playlist including at least one playitem and at least one sub-playitem, the playitem indicating at

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least one of the still picture units to reproduce from the First file and providing duration information for display of the still picture in the still picture unit, and the sub-playitem providing navigation information for reproducing the audio data from the second file.”

This claim reads on claim 1 above.

Regarding claim 17, grounds for rejecting claim 2 apply for claim 17 in its entirety.

Regarding claim 18, grounds for rejecting claim 3 apply for claim 18 in its entirety.

Regarding claim 19, grounds for rejecting claim 4 apply for claim 19 in its entirety.

Regarding claim 20, claim 20 recites, “The recording medium of claim 16, wherein the navigation area further includes a clip information file, the clip information file including at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream.” This claim reads on claim 5 above.

Regarding claim 21, grounds for rejecting claim 6 apply for claim 21 in its entirety.

Regarding claim 22, grounds for rejecting claim 7 apply for claim 22 in its entirety.

Regarding claim 23, Okada teaches recording medium wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit (see Fig. 4).

Regarding claim 24, grounds for rejecting claim 9 apply for claim 24 in its entirety.

Regarding claim 25, grounds for rejecting claim 10 apply for claim 25 in its entirety.

Regarding claim 26, claim 26 recites, "The recording medium of claim 25, wherein the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet." This claim reads on claim 7 above.

Regarding claim 27, grounds for rejecting claim 12 apply for claim 27 in its entirety.

Regarding claim 28, Okada teaches a recording medium wherein the first (Video Part) and second (Audio Part) files are clip (VOB) files (see Fig. 10(c)).

Regarding claim 29, Okada teaches a recording medium wherein the playlist (PGC) further includes at least one sub-playitem (Cell) , the sub-playitem (Cell) providing navigation information (see cell_Start_Time within the AUDIO EXTENTION on Fig. 9(a)) for reproducing the audio data from the second clip file (see Fig. 9(a)).

Regarding claim 30, grounds for rejecting claim 15 apply for claim 30 in its entirety.

Regarding claim 31, call the limitations of this claim have been analyzed in relation to claims 1 and 7.

Regarding claim 32, claim 32 recites, "A recording medium having a data structure for managing reproduction duration of still images, comprising: a data area storing a packetized elementary stream of still picture data, with each packet including a still picture; a navigation area storing at least one playlist, the playlist including at least one playitem, the playitem indicating at least one of the still pictures to reproduce and providing duration information for display of the still picture in the still picture unit, the duration information indicating whether to display the still picture for one of a finite and an infinite period of time; and a number of the packets including a presentation time stamp such that, when the duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet." This claim reads on claim 1 above.

Regarding claim 33, claim 33 recites, "A method of recording a data structure for managing reproduction duration of at least one still image on a recording medium, comprising: recording presentation data multiplexed into a transport stream in a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data and recording at least one playlist on the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing duration

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information for display of the still picture in the still picture unit.” This claim reads on claim 1 above.

Regarding claim 34, claim 34 recites, “A method of reproducing a data structure for managing reproduction duration of at least one still image recorded on a recording medium, comprising: reproducing presentation data multiplexed into a transport stream from a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data; and reproducing at least one playlist from the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing duration information for display of the still picture in the still picture unit.” This claim reads on claim 1 above.

7. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (U.S. Patent number 6,122,436) and in view of Kanazawa et al. (U.S. Patent Number 6,580,870) as applied to claims 1 - 34 above, and further in view of Monahan (U.S. Pub. No. 2004/0141436).

Regarding claim 35, note the discussion of claim 1 above. The proposed combination of Okada and Kanazawa does not teach a recording medium, comprising: a driver (Fig. 1, write head 155) for driving an optical recording device to record data on

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the recording medium; and a controller (Fig. 1 SYSTEM CONTROLLER 140) for controlling the driver.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention use a driver (read head) and a controller in order to be able to write data on an optical medium.

Regarding claim 36, grounds for rejecting claim 35 apply for claim 36 in its entirety.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitiku Debelie whose telephone number is (571) 270 1706. The examiner can normally be reached on Mon - Fri 8:00 - 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272 7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD
08/03/2007

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